

Patent claims

1. A connector-plug part (1) for an optical plug-in connection, with a connector-plug pin (2) for receiving an optical waveguide extending over a longitudinal center axis (3) and with a sleeve-like pin holder (4) with a pin receiving section (5), in which the connector-plug pin is held, and with a cable receiving section (6), to which the end of an optical waveguide cable (7) can be fixed in a tension-resistant manner, characterized in that the cable receiving section (6) has at least one cladding part (8), which can be pivoted at a joint (9) by a certain pivoting angle between an open position and a closed position.
2. The connector-plug part as claimed in claim 1, characterized in that the pin holder (4) comprises at least two shell parts (10, 10'), which can be fitted together along the longitudinal center axis (3), each shell part having a pivotable cladding part.
3. The connector-plug part as claimed in claim 2, characterized in that the cladding parts altogether form the cable receiving section (6) and are connected to the pin receiving section at the joint.
4. The connector-plug part as claimed in claim 2 or 3, characterized in that the pin holder (4) comprises two identical shell parts (10, 10') which can be fitted together on a plane running through the longitudinal center axis (3).
5. The connector-plug part as claimed in one of claims 2 to 4, characterized in that neighboring shell parts have on their contacting surfaces (11) projections and clearances which en-

gage in one another, in particular conical lugs (12) and lug openings (13).

6. The connector-plug part as claimed in one of claims 1 to 5, characterized in that, to secure the pin holder (4) in a connector-plug housing (14), at least one conical section (15), which can be pressed into a corresponding conical receptacle (16) on the connector-plug housing, is provided on the outside of the pin holder.
7. The connector-plug part as claimed in one of claims 1 to 6, characterized in that the pin holder consists of a plastic material and in that the joint (9) is a film hinge.
8. The connector-plug part as claimed in one of claims 1 to 7, characterized in that the connector-plug pin (2) is mounted with limited displaceability in the pin receiving section (5) under axial spring prestressing.
9. The connector-plug part as claimed in one of claims 1 to 7, characterized in that the connector-plug pin (2) is fixedly held in the pin receiving section (5) and in that at least one axially resilient region is provided on the cable receiving section (6).
10. The connector-plug part as claimed in claim 2 and claim 8, characterized in that a rib (17) which engages in a clearance (18) in the outer circumferential surface of the connector-plug pin (2) in such a way that its resilient displacement is limited and that it is held in a rotationally fixed manner is arranged on the inside of at least one shell part (10), in the region of the pin receiving section (5).

11. The connector-plug part as claimed in claim 8 or claim 10, characterized in that the connector-plug pin (2) is prestressed in the pin receiving section (5) by means of a helical compression spring (19).
12. The connector-plug part as claimed in one of claims 1 to 11, as a pre-assembled unit (10) for connecting onto the end of an optical waveguide cable (7), an optical waveguide stub (21) being fastened in the connector-plug pin (2) in such a way that its stripped end (22) on the cable side lies within the pivoting region of the cladding part and the cladding part or the cladding parts being kept in an at least partly opened position.
13. A method for connecting a connector-plug part (1) as claimed in one of claims 1 to 11 to the end of an optical waveguide cable (7) using a pre-assembled unit as claimed in claim 12, characterized
 - in that the pin holder (4) and the cable end are clamped in such a way that the bare conductor end (22) of the optical waveguide stub (21) and the bare conductor end (23) of the optical waveguide at the cable end lie coaxially opposite each other on a centering block (28),
 - in that the bare conductor ends are welded to each other,
 - in that subsequently the cladding part or the cladding parts is or are pivoted into the closed position,
 - and in that the cable end is connected to the cable receiving section (6) in a tension-resistant manner.
14. The method as claimed in claim 13, characterized in that, after the welding, the welded location is enclosed with a protective element (25).

15. The method as claimed in claim 13 or 14, characterized in that, after the welding, the pin holder (4) and the cable end are removed, in particular raised, from the centering block (28) in the clamped state.
16. A device for carrying out the method as claimed in claim 13, characterized by
- a first clamping means (26) for clamping in the pin holder (4),
 - a second clamping means (27) for clamping in the cable end,
 - a centering block (28) with a v-shaped centering groove (29) arranged between the first and the second clamping means,
 - the centering block (28) having in the region of the intended welded location (24) a clearance (30) interrupting the centering groove (29).
17. The device as claimed in claim 16, characterized in that the clamping means (26, 27) are provided with a lifting device for simultaneously lifting the welded optical waveguide off the centering block (28).